Tijdschrift voor Economie en Management
Vol. L, 5, 2005

Using Economics in Antitrust Decisions: Five Lessons from the European Scene*

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ABSTRACT

In vijf duidelijke lessen wordt aangegeven welke de meest gemaakte fouten zijn in de beslissingspraktijk van het mededingingsbeleid. De valkuilen zijn nochtans welbekend bij de economen die zich specialiseren in de analyse van de mededinging en sijpelen steeds verder door in brede kring. Het is derhalve makkelijk onkunde of onwil (het dienen van andere belangen) bij mededingingsautoriteiten te ontmaskeren, niet enkel voor de experten maar ook voor een groot publiek. Het artikel legt uit welke fouten zeker vermeden dienen te worden, en waarom.

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Five lessons on avoiding common mistakes in antitrust decision making are the subject of this contribution. Although many of the usual mistakes are well-known by specialists in industrial organisation, practioners keep falling in the same trap time after time. But the mistakes become well-known also to a broader audience and hence it is easy to expose the incompetence or captivity of certain decision makers. The article stresses what errors are inadmissible, and why this is the case.

* Comments by R. De Bondt are gratefully acknowledged. All remaining errors are mine.

INTRODUCTION

Whereas the use of industrial organisation (IO) in antitrust decision making in the U.S. has a long tradition, this activity is fairly novel in the European Union. Industrial organisation has been and is a well developed discipline in a variety of European Countries, but the application of academic insights to specific cases or even generic design of policy is largely limited to the last decade.[1] And still, academic economists have a hard time to get their ideas across. The main obstacle is not an aversion of decision makers against industrial economics as such, but rather is explained by the fact that the skills are very specialised and scattered around over the literature.[2] And practioners mostly have not been guided through the explosion of results from industrial economies.

In some European countries like Belgium, decision makers are mostly people with a legal training, by the fact that half of the authority is composed of judges operating in the legal circuit while many other members (experts) often also have a legal background. The implication is an understanding of perfect competition and monopoly, the so called "pure" market structures as we cover them in principles courses, but no familiarity with all the industry models and techniques that have been recently designed to solve antitrust problems, such as merger simulation based on discrete choice theory or cartel impact and stability analysis using supergames.

The claim made in this article is *not* that antitrust decision makers should be experienced in the use of the formentioned techniques. But since these techniques are important to guide the process of taking a decision in the good direction, they at least should have some familiarity with them. Within the context of this contribution, it is impossible to achieve the target of transferring sufficient knowledge to reach a full understanding of the recent models and techniques that constitute the economic foundation for antitrust decision making. A certain degree of familiarity however is a feasible goal we set out for. Further material is covered in Van Cayseele (1994) and Motta (2004). An historical perspective is given in Van Cayseele and Van den Bergh (2000).

The organisation of this article then is centered around some lessons that illustrate the pitfalls that often misguide decision makers. Although these erroneous principles are well known among industrial organisation experts, they survive for some reason or another among practionisers.[3] Therefore, the target audience for this article precisely are judges or government officials involved in competition policy, as well as managers and lawyers defending companies in antitrust cases. Avoiding the mistakes that are documented is important for everyone, and not in the least for those who take decisions or defend their clients, since the mistakes are easily exposed to a broad audience and well understood by the economic profession at large, implying a serious loss of reputation to those involved in the mistakes.

The presentation of this article falls short of claiming to be exhaustive. Many more shortcomings in the practice of competition policy

can be exposed by the discipline of industrial organisation. The field of IO also can be very helpful in other area's, see De Bondt ((2000) and (2005)) for the impact on strategic management, and Van Cayseele ((1995), (1998) and (2004a)) for the contributions to banking, high tech industries, as well as other area's of economics.[4] For the moment, we only can advise the interested reader to consult these references. We now focus on five "don'ts" in the practice of antitrust decision making.

II. DON'T FOCUS ON THE NUMBER OF FIRMS OR CONCENTRATION RATIO'S *AS SUCH*

In the merger review process, the purpose is to assess the impact of the operation on the prices after the merger. The test in fact is whether the merger will create a Small but Significant Nontransitory Increase in Prices, or SSNIP. Usually, a price increase of 5 percent is considered to be the threshold not to pass in order to get clearance for the operation.

In figure 1 below, which has been coined by John Sutton (1991) the $P(N)$ function, it is shown how different industry models yield remarkable different predictions regarding the post merger price increase. The $P(N)$ function traces the relationship between the price charged by the firms in industry and the number of firms that is active in the industry. Clearly, the $P(N)$ function is not very informative as to what can be said in general when due to a merger the number of firms decreases from say 5 to 4.

Figure 1 is best read as follows: on the horizontal axis is the number of firms, the C4 concentration ratio in the second row as well as the Hirshmann-Herfindahl index in the third row. On the vertical axis is the price level associated with $N(=1,2,3,4,5.....)$ symmetric firms competing with each other in a particular way. Three different industry models are shown: cartel (the independent firms collude overtly or tacitly and in fact do not compete), Cournot (the independent firms produce outputs which are sold by a Wallasian auctioneer who determines a market clearing price) and Bertrand (the independent firms compete by quoting prices to the market).

FIGURE 1 ABOUT HERE

FIGURE 1
The P(N) function for Betrand, Cartel and Cournot model of industry

Clearly, for two models out of three, the merger has no impact on prices, for regardless whether the number of competitors is two, three, four or more, the price charged by the firm is either equal to the monopoly price (in

the Cartel case) or equal to marginal cost (in the Bertrand case). This implies that the merger readily can be cleared in both cases, although in the first case a "cellophane type of fallacy"[5] is made. Only in case of the Cournot model, the price would increase when out of five competitors two merge, notably with 6,66 percent.[6]

This clearly indicates that antitrust authorities when they engage in a merger review process should do somewhat more than look at the number of firms or concentration ratio. If that is the only activity in which the authority is engaged in, it is redundant, for figure 1 clearly indicates that what matters is the shape of the $P(N)$ function, not the number on the abcissa of the graph. This implies that antitrust authorities should investigate what the true model of competition in the industry is, and calibrate it to the observed data on market shares, prices, ….. Only then it becomes possible to simulate the effects of a merger, by focussing on the so-called unilateral effects. The latter have a sound foundation in economic theory. They more precisely rest on the non-cooperative game theoretic solution concept introduced by Noble Prize in Economics laureate John Nash, see Werden (2005) for a description of the methodology of merger simulation.

Picking the appropriate industry model is tantamount to tracing the locus of the $P(N)$ function and that is not an easy task, since many other models of industry than Bertrand, Cartel or Cournot exist. For one thing, all of the above models assume homogeneous goods, but most industries produce heterogeneous goods, that is the world is characterized by product differentiation. For such an environment, product differentiation models have been designed and applied to various cases, see Van Bergeijk and Kloosterhuis (2005) for a collection of case studies in European countries.[7] This implies that the technicalities of the models are no longer an obstacle, since "canned" solutions have been developed to be readily applicable. As pointed out by Werden (2005), initial results are obtained after one week of work, and hence the argument that at least some form of merger simulation cannot be done within the brief delays that antitrust authorities get to decide on a case is no longer valid.

Moreover, these studies often yield very powerful insights for management or political decisions. Therefore, one should expect to see more of them already in place before a merger case comes up, although it still tends to be the other way around. A good example is Van Cayseele (2005a), showing that the merger between Hessenatie and Noord Natie, two container traffic handlers situated in the port of Antwerp could be cleared, although both players together have substantial market shares. The reason is that container handlers in the port of Antwerp face sufficient competition from those located in Bremen, Hamburg, Rotterdam and Le Havre. But interestingly, Antwerp due to its inland location and the lack of depth of the Scheld faces a competitive disadvantage vis-a-vis Rotterdam, or conversely Rotterdam has a source of market power which can be exploited. This leads to the amazing conclusion that deepening the Scheld and improving the access

of the port of Antwerp, could benefit the Dutch economy as well, since importers located in the Netherlands also would benefit from the stronger competitive pressure that Antwerp can put on Rotterdam when it becomes more accessible. But typically the Dutch government was not so keen on taking up engagements to deepen the Scheld, mainly invoking the possible environmental damage that could result from this process.

In order to conclude for the first lesson that can be learned from the recent European practices in competition policy, it is clear that the mere focus on the number of players in an industry no longer is sufficient for decision making. Well-elaborated alternatives exist and can readily be applied, so if an authority is spotted that only looks at numbers of firms or concentration ratio's, it should quickly be exposed as a redundant agency. This will become even more pronounced as industry and politics more and more use models to cast consumer demand for the various products and services that firms offer to the market, or to compute the welfare impact of government regulation.

III. DON'T JUMP TO "MONOPOLY" CONCLUSIONS, FOR EVEN WITH ONE OR TWO FIRMS, IT IS NOT STRAIGHTFORWARD TO CONCLUDE ON PERFORMANCE

As the result of many initiatives taken by the internal market directorate of the European Commission, many players who were previously sheltered from competition now became exposed to competition from their counterparts abroad. Electricity, telecom, stock exchanges are but a few examples where competition was organized along a "vertical silo" model, where in each country a monopolist would produce, distribute, retail etc. The obligation to provide access to each stage has led to many complaints regarding unfair access conditions, differential treatment, a.s.o..

Of course, this kind of problem had been experienced long before in the U.S. with the deregulation of telecom and the breaking up of the Bell AT&T monopoly. The contestable market model resulted, see Baumol, Panzar and Willig (1982). Essentially, contestable market theory argues that there is no reason to fear the monopoly, at least under certain conditions. One such condition is that there is a potential entrant to which consumers readily can switch if the monopoly starts exploiting its market power. We will further elaborate on the force of entry in the fourth lesson.

For the moment it is sufficient to note that there are many other arguments in the literature that on the one hand a single player in industry, i.e. a monopolist, does not need to have market power per se, while on the other hand in a duopoly one can get monopoly market power even without an explicit cartel agreement. We first explain why a single player does not need to have market power and next show why the converse result equally can hold, that is a duopoly achieves the textbook monopoly outcome.

One of the first to argue that many monopolies have limited market power was Noble Prize in Economics laureate Ronald Coase. In Coase

(1972), it is argued that the lack of commitment power by a monopolist who sells a durable good will lead to a near perfectly competitive outcome. The reason is a simple one: consumers with a certain valuation of the good expect that once they have bought, the monopolist will lower his price to serve consumers with a lower valuation of the good. But if that is the case, they better can wait for the monopolist to lower his price. And the monopolist in turn can do nothing else than to lower his price, all the way to the lowest valuation he ever would serve, but that is precisely the competitive price.

Whereas many scholars have raised their scepticism vis-à-vis the so called "Coase conjecture", see Fudenberg and Tirole (1991) for a careful analysis of the argument, industrial organisation has incorporated the argumentation to elaborate on competition that emerges from second hand markets, see Bulow (1982). When a producer sells a durable good, others can start competing with the monopolist when consumers who no longer need the service of the good resell to them. This was the case in the famous Aluminium Company of America (ALCOA) case, where it was argued that a proper delineation of the market should include the sales of the recycled aluminium. According to the judge, this wasn't the case since ALCOA once controlled all the sales of primary aluminium and hence could also control the future supply by second-hand suppliers.

The real problem (to ALCOA) however is not the fact that it has to control what it sells today to steer the supply it will compete with in the future, the problem is that ALCOA cannot control its future supply of aluminium. Therefore, buyers of aluminium know that when they re-sell later on, there will be more aluminium on the market, and hence the resale value will be less than what they would detain when ALCOA would shut down immediately after they had bought. If they kept the aluminium for a considerable time and ALCOA meanwhile floods the market with aluminium, their resale value even would become zero. But the willingness to pay for aluminium today depends on both the reservation value they have for using the aluminium for some time, and the resale value they obtain for it when they don't use it anymore and resell. Hence when ALCOA completely lacks commitment power and floods the market, buyers will not take into account any of the resale value of it and a much lower price will result. In fact when buyers of aluminium expect that ALCOA will flood the market instantaneously after they have bought, they will conjecture that aluminium is a ubiquity and they will hold back their purchases of aluminium for they expect it to be free tomorrow. Again this leaves ALCOA no other choice than not to charge today. Or the Coase conjuncture with consumers using the good forever and the monopolistic seller lacking commitment power is equivalent to ALCOA's problem with a second-hand market for aluminium. In Van Cayseele (1993) I show in a more formal way under what conditions this equivalence carries though. Therefore, the two approaches can often be used interchangeably, and this opens new avenues to understand markets where competition intrinsically is intertemporal.

In reality, many industries exist for which there are players who operate on the primary market and others on the secondary. The general idea that consumers take into account the linkages between these markets ex ante then often exerts sufficient discipline onto the players. More in particular, it is sufficient that there is strong competition in one stage, that the possibilities to exploit market power in other stages are limited. With markets for spare parts for example, car manufacturers could easily exploit their position when a component breaks down, and overcharge the unfortunate consumer who's car broke down. The fact that this game is practiced however would quickly spread among consumers who would turn to other car manufacturers in the primary market. As a matter of fact, the sole expectation that a car manufacturer could behave in such way when he lacks commitment, has lead car manufacturers to commit to guarantees of all kinds, where they sell besides cars an insurance policy for the repair of certain parts when they break down before 100.000 kilometers, for example. Nonetheless, in Hugain v. Commission, the market was defined "as the U.K. market for spare parts".

When sometimes a monopoly has no market power, the converse equally could be true. A duopoly (or oligopoly) then has the same power that can be achieved by a textbook monopoly. This will be the case for example even when the duopolists compete in prices, but have the possibility to buy each others' output before consumers can acquire it. In Van Cayseele and Furth (1996), it is made clear that for the simultaneous move game where firms at the same point in time announce prices, the outcome is far less competitive than the Bertrand outcome. In Van Cayseele and Furth (2001), it even becomes clear that the monopoly outcome is achieved when one firm leads and the other follows. In some cases, the Stackelberg leader and follower even can be determined endogenously, and the resulting "natural" division of the profits provides a noncooperative rationale for a particular cartel division rule which sometimes is said to be used when cartels have formed.

While the fact that one firm buys out the output of another might seem odd, this practice often is observed in reality in industries like airlines, electricity, diamonds a.s.o.. But the research started by noticing that officials of the O'Neill headquarters at some point in time entered shops to buy …… O'Neill clothes. As such, the technique might be an effective way to establish resale price maintenance. Only recently, Décathlon was convicted in France because shopkeepers and officials from the headquarters eliminated the output of other shopkeepers who sold Décathlon products at a discount.

To conclude for the second lesson, again, the number of firms as such is useless as an indicator for the performance of the industry. In some cases, two rivals will be able to achieve the textbook monopoly outcome, while sometimes a monopolist will not do better than a firm operating under perfect competition. To highlight these peculiar findings, industrial economists have published articles with provocative titles such as: "One is Almost Enough for Monopoly", see Ausubel and Deneckere (1987), or "Two is not too Many for Monopoly", see Van Cayseele and Furth (2001).

Industrial economics will be of a tremendous aid to decision makers in these industries, but the solutions here are not ready-made. Careful analysis of the underlying competition game between primary producers, secondary producers and consumers is a condition sine qua non to get at the correct conclusions.

IV. DON'T FOCUS ON ONE SIDE OF THE MARKET WHEN IT IS TWO-SIDED

In the same spirit of European market integration, many other industries that previously had been organised at the national level caught the interest of regulators. Often payment systems, debet and credit cards, stock trading platforms, clearing and settlement organisations, a.s.o. had been set up as associations between domestic banks, brokers and traders, or a combination of both. Since due to pronounced network externalities, the scale economics to be attained by a single player are tremendous, and hence only one of the above mentioned organisations existed at the state level. Again, the taste of monopoly, here enforced by the flavour of a joint initiative by related players, led to scrutiny. Especially because in the present case, antitrust authorities received complaints from one side of the market, who was complaining it subsidized the other side.

Meanwhile, industrial economists indicated that many of these industries are two-sided. This means that the players cater for two distinct groups of consumers, but more importantly, that both groups need to be present to a sufficient extent in order for the business to start. For example, a consumer will only get a credit card if he can pay with it in a sufficient number of shops. But a shopkeeper will only invest in a terminal that can process the card if sufficient customers are around who desire to use the card for paying for their purchases.

An economic analysis of these so-called platforms, see Rochet and Tirole (2003), reveals among other things that the price structure rather than the price level charged to one side should be looked at. Social welfare might dictate that one side of the market, say merchants, subsidizes the other side, say cardholders. Hence, complaints by merchants that they overpay might be true from the viewpoint of the margins that are taken on them (by renting cardreaders or withholding a discount from the payment), but they could be warranted from the viewpoint of a welfare maximizing platform that has to promote the use of cards with consumers. Here, the real cause of the problem rather seems to be government itself who provides a free instrument of pay, i.e. central bank notes (cash). Or consumers have a costless alternative to cards, namely cash, although several studies indicate that cash is extremely costly to society. What happens is that banks absorb the cost of handling cash and hence are forced, together with merchants, to cross-subsidize cash.

Nonetheless, antitrust authorities both in Belgium and the Netherlands have taken a severe attitude against card associations and

payment systems. Both Banksys and Interpay were fined for surcharging, and in one case the decision even stated that although there are two sides to the market, the focus of the case was on one side were according to the decision the platform misbehaved.

Similar considerations enter the discussion when various European and national regulations, and antitrust agencies recently discovered the securities post-trading businesses. This industry among others involves clearing and settlement, see Van Cayseele (2004b) and Van Cayseele (2005b). Whereas primary settlement, that is acknowledging the new net positions in the security after trading occurred only can be done by the Central Securities Depositaries, many other banks closer to the trader can settle on their own books. When a particular bank has a substantial market share in the management of wealth, it is not unlikely that most settlement can occur internally. Hence although the CSD's manage the "global note", i.e. the entire emission of securities by the company that sought external finance, many other players provide the same services of settlement, asset servicing a.s.o. Nonetheless, some antitrust authorities concluded that the CSD's held a monopoly position.

Especially the cost of settling cross border securities transactions has further led to the question whether or not monopoly power was exploited. One could of course easily point to the substantial regulatory and tax differences that exist, making it much costlier to clear and settle internationally. But more importantly, one again should keep in mind that the market is two-sided. Also the companies which emit securities are clients of the platforms. And hence, if the platform, which mostly is user owned and governed, has to charge less on one side, it will have to increase charges to the other side.

For European clearing and settlement, which has the special feature that complementary platforms are involved since settlement still is organised on a country by country basis, except for a few (I) CSD's, I show that it is not unlikely that companies will face increased tariffs, see Van Cayseele (2005b). For the moment, this side of the market is charged very low fees, since they need to be convinced to choose direct finance (emission of securities) over indirect (bank loans).When the investor side however is charged less, the platform will in order to break even, increase the charges to the companies. This might lead to a reduction of direct finance, reducing the appeal of stock exchanges, over-the-counter emissions, a.s.o., precisely a target the European Commission should avoid, given the high rates of bank finance already present in the so called "continental, bank based system", as opposed to the "angle-saxon, market based model".

To conclude for the third lesson, many markets are two-sided. In some cases, the explosion of the academic literature has led to an overkill, and practioners have tried to find platforms in health care systems, banking markets, a.s.o.. In a few cases, mostly related to payment systems and settlement however, it seems that authorities mistakenly disregard the two-sidedness of the market.

V. DON'T RELY (TOO MUCH) ON ENTRY

When introducing the second lesson, it was made clear that entry was a potential strong force, possibly making antitrust authorities entirely redundant. The contestable market model by Baumol et. al. indeed shows that a monopoly may be forced to charge the competitive outcome as the result of pressure by potential rivals. In small open economies, this argument was translated into the thesis that if domestic players exerted monopoly power, consumers easily could start importing from abroad.

It is well known that contestability has its limits in general, see Brock (1983), Van Cayseele and Furth (1996), as well as in particular markets (like banking, see Van Cayseele (2004a)). The argument that entry to a serious extend can do the job of competition policy however cannot be dismissed a priori. Therefore, in Van Cayseele (2002), I investigate a theoretical model where I contrast the additional gain an antitrust authority can achieve over free entry. It turns out that some general statements can be made merely by looking at initial concentration and the degree of product differentiation, which is promising. The reason why in the present context, results that hold across industries can be proven, is that one takes a comparative approach. Forces that determine the bad effects of a cartel will affect the force of entry in an exactly predictable way. Hence, in the cases that breaking up the cartel is worthwhile, entry might do an equally good job, or fail, depending on but a few industry characteristics. Undoubtedly, this research agenda offers unexplored possibilities for deriving "priority rules" to antitrust authorities. But deriving the results is complicated and for specific cases at hand, it is to be doubted whether a conviction or an acquittal ever will be reached by pointing to the fact that "the industry tends to be moderately concentrated, and manufactures a rather homogeneous product".

On the empirical front, also work has been done to trace down the forces that exert pressure on industry prices. These studies can be classified regarding to whether they directly analyse entry as in Geroski (1991), or indirectly. Only the last avenue is explored to some extent here. In Konings, Van Cayseele and Warzynski ((2001); (2005)), the force of entry is captured indirectly by focussing on import competition, and controlling for other factors that exert pressure on price-cost margins. Efforts are undertaken to methodologically improve on the ways to estimate price-cost margins. It turns out that the force of entry has an impact that differs from country to country. In direct competition with a dummy that captures the existence of a competition authority, it shows how for some countries, such as the Netherlands, competition policy accounts for the pressure on margins, and that few results if any have to be expected from imports. This contrasts to Belgium where the antitrust authority hardly has had any effect.

To conclude for the fourth lesson, it seems that if serious doubt exist in a particular case, and decision makers have to put their faith in the force of entry to correct for possible misbehaviour that could result from mergers, they

better take their responsibility immediately. Both from direct and indirect studies, it shows that entry is slow and weak. Often many regulations exist so as to make sure entry cannot exert much pressure. Lobbying activities try to preserve these barriers, while firms can erect others in the market. As once witnessed in the case of a concentrated market with a dominant player, the potential entrant from abroad was acquired by the dominant firm before it had the chance to enter the domestic market.

VI. DON'T RELY ON WHAT RIVALS SAY

For the last lesson, we combine insights from the field of industrial organisation with the discipline of information economies as pioneered by Baron and Myerson (1982), Milgrom (1981) and others. Already since Stigler, it is known that mergers and cartels not only affect insiders but also outsiders. In many cases, an outsider even will be better off than an insider. To understand why this is the case, consider a cartel where the members agree to restrict the output in order to raise industry prices. All cartel members benefit from the increased industry price, but at the cost of limiting what they sell. Next consider an outsider. He also benefits from the increased industry price but does not need to restrict his output. Hence he wins in both directions: he can sell what he was used to or even more, at an increased price. It can be shown that for a variety of oligopoly games, it holds true that outsiders benefit more than insiders from a cartel or a merger. But then outsiders, for example to a merger, are likely to testify that the merger will not have any detrimental effect. The reason simply is that they should not object against it as it is going to benefit them.

When a merger is likely to yield serious cost savings, the merging parties can decrease their price and expand their market share, in a profitable way. This in turn could lead to scale economies being realized, leading to further cost savings, price decreases and increased market shares. The parties remaining outside the merger cannot realize the same cost advantages, and will need to keep their price at the same level. With reduced sales volumes, this is likely to decrease profits. But the cost savings realized by the merging parties are passed on to the consumers, which is beneficial to society as a whole. Hence the merger should be approved, but outsiders will try to block it, for example by stating in hearings that it increases market power.

Hence, when the antitrust decision maker relies on the information of interested parties, and these parties have an interest in the merger getting blocked when it is bad to them but beneficial to society, they will lie in the hearings and try to show an increase in market power. When on the other hand the merging parties lie and indicate potential cost savings for the merger when in fact it targets increased market power, the rivals will corroborate the statements made by the merging parties, although untrue. Since if the merger goes through, the outsiders will benefit as much or more than the merging parties, but society will lose.

The fact that the incentives to rely on information of third parties (outsiders) to a merger are wrongly structured is confirmed by empirical evidence. Eckbo (1983) shows that the cumulative abnormal returns of stocks of companies not involved in a merger, but operating in an industry where the U.S. authorities investigate a merger, increase. That is the stock prices of rivals of the companies that merge, but where the U.S. authorities have serious doubts and start an investigation, have increased more than normally. One however has to be careful in concluding from this that the authorities pick the appropriate cases to investigate, since many other explanations may exist, while these so called "event studies" are not without criticism. Nonetheless, the method has some appeal. Recently, Duso, Neven and Röller (2003) came with evidence on the mistakes made by the European Commission. They show that cases which normally had to pass the merger review process where unjustifiably blocked. From the 4 cases, the European Court of Justice send back 2 cases after appeal, pointing to the lack of a sound economic analysis of the case. It is impossible to know what precise arguments where used to block these cases, but if in the realm of politics and lobbying the European Commission has spend more time in listening to rivals as opposed to doing its homework, then it is not unlikely that the evidence obtained was not in line with the economic foundations of competition out there, as noted by the Court.

To conclude for the fifth and last lesson, it is a pity that decision makers tend to follow the easy way of collecting information from rivals and to listen to their stories rather than to spend some time in investigating the case at hand along the lines of an economic model. If, systematic evidence of wrong decisions comes up, it will be not for long until the antitrust authority will be replaced by another mechanism that inflicts less costs upon an economy.

VII. CONCLUSION

After having been exposed to these five lessons, the reader might have become very sceptical to the practice of antitrust decision making. There is no reason to. After having served for two consecutive periods of 6 years in the Belgian antitrust authority, the author can testify that there are literally hundreds of excellent decisions that have been taken too. And the same can be said for the decisions taken in other countries. Hence the lessons only are intended to improve upon the track record of the authorities, by avoiding that the few painful mistakes of the past are repeated.

If there is one severe blame, it rests on the shoulders of policy makers, at least in Belgium. Since I have documented their defaults elsewhere, at the occasion of a colloquium evaluating ten years of competition policy in Belgium, see Van Cayseele (2003a), I will not elaborate on this any further here (see also Maks and Hupkes (2005)). Should the reader however want to find out what determines the level of the thresholds for which merger

review becomes mandatory, he should not be bothered with the potential costs of the review process to enterprise [9]. Or with considerations regarding the size distribution of firms in a particular industry. Rather he should know these thresholds are a function of the number of cases the antitrust authority has to deal with, given the latter's size remains fixed, …… for political reasons.

NOTES

1. The European Association for Research in Industrial Economics, E.A.R.I.E., was made an official organisation at the event of the 1982 Congress in Leuven. Meanwhile the Katholieke Universiteit Leuven hosted the E.A.R.I.E. Congress also in 1999. The next edition will take place in Porto in the fall of this year. Among the Editors in Chief of Tijdschrift voor Economie and Management figures a former president of E.A.R.I.E. (R. De Bondt) and a member of the Executive Committee (this author). The Katholieke Universiteit Leuven counts among its academic staff many more executive members of E.A.R.I.E. and editors of the International Journal of Industrial Organisation, Journal of Industrial Economics or CEPR program coordinates, more precisely L. Sleuwaegen, R. Veugelers and F. Verboven, to name only a few. Recently, another initiative has been taken in the form of the Association of Competition Economics (A.C.E.). This organisation is even more focussed on the use of industrial and micro economics and econometrics in antitrust issues and will hold its third conference in Copenhagen.
2. Some countries like Belgium had previously an elaborate system of price controls in place. As in many area's of economic policy, the scene was organised around trade representatives, labour unions, politics a.s.o.. The installation of a "specialised court" came to many as a shock, and the usefulness of competition policy in a small open economy was questioned by some, see Sleuwaegen and Van Cayseele (1998) for an analysis of the arguments.
3. Special interest of course could benefit from there mistakes, and hence they would do all to keep the misunderstanding in place. Recently, the political economy of antitrust has focussed on the wealth transfers following from an active antitrust policy, see Rowley and Rathborne (2004).
4. Especially high tech industries merit further elaboration. A subfield of industrial organisation called "The Economics of Technological Innovation" early on showed that difficult trade-offs exist between static and dynamic efficiency, see Kamien and Schwarz (1976). Even in terms of remedies, it is not clear what the appropriate policy measures are since some of them can be abused by dominant players in the market. Kamien (2005) provides an intricate analysis of there practices. A related issue is whether R&D cooperation should perhaps be stimulated explicitly by government, see Hinlooper (2003) or Cassiman and Veugelers (2002) on this issue.
5. The "cellophane fallacy" was documented in the well-known Du Pont case where the U.S. Supreme Court defined the market in a very wide way. This means that competitors are identified which by no means exert a truly disciplinarily force on the pricing behaviour of a dominant firm. Hence should they merge with the dominant firm, this hardly will lead to a price increase, since the dominant firm already could price in an independent way before the merger.
6. When N Cournot competitors face a linear market demand function that links the Walrasian price P to total industry output $Q = \sum_{i=1}^{N} q_i$ in the following way: $P = 1 - Q$, it becomes easy to show that in equilibrium the price is given by $P^* = c + \frac{1-c}{1+N}$. Hence, when c = .25 and N = 5, the pre-merger price equals .375. When two firms merge,

one obtains .40, or a price increase of .025. Percentagewise, this boils down to a price increase by 6,66%, which would violate SSNIP5.

7. Industries for which well developed specifications of the demand in the presence of product differentiation exist are cars, see Berry, Levinson and Pakes (1995) or Verboven, ready to eat cereals, see Nevo (1996), to name only a few. Many of the above have been used in actual decision making on mergers.
8. Although these are very different between sectors and countries, see Van Cayseele, Konings and De Loecker (2003b).

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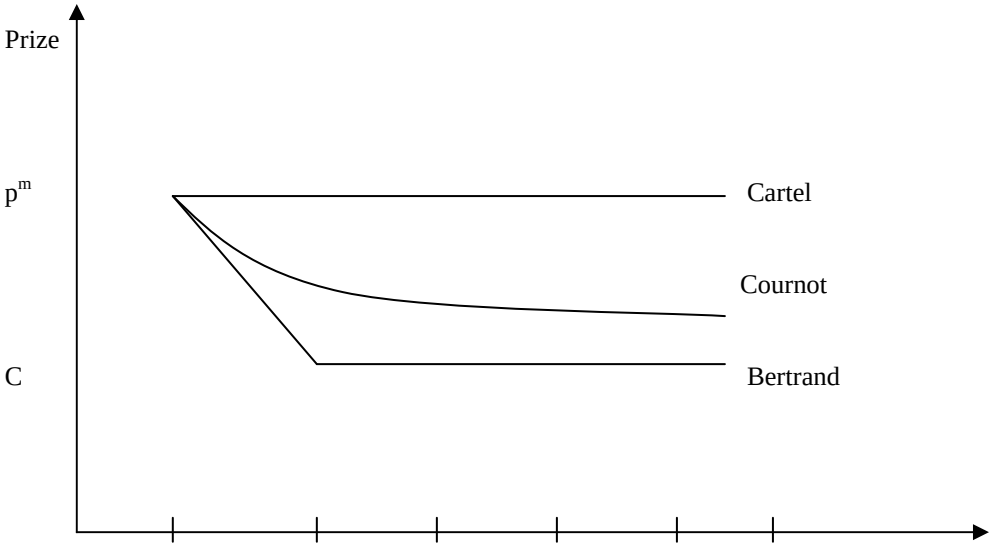
FIGURE 1

The $P(N)$ function for Bertrand, Cartel and Cournot model of industry



p^m denotes the monopoly price, c marginal cost, magnitudes on both of the axes are measured on different scales.